

Interview Summary

Application No.
09/071,541

Applicant(s)
Huang et al.

Examiner
Kathleen Kahler Fonda

Group Art Unit
1623

All participants (applicant, applicant's representative, PTO personnel):

(1) Kathleen Kahler Fonda

(3) Beth Weimar

(2) Tom Poche'

(4) _____

Date of Interview 11-20-00

Type: ☐ Telephonic ☒ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description:

Agreement ☐ was reached. ☒ was not reached.

Claim(s) discussed: None

Identification of prior art discussed:

Han (K) and Reed (A)

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Mr. Poche' and Ms. Weimar argued that the invention was not obvious over Han in view of Reed. First, they argued that synergistic results had been demonstrated (see Fig. 6B and page 25, line 28, to page 6, line 9). Second, they argued that the Howell reference was a teaching away from combining a tyrosine kinase inhibitor and an apoptosis inducer. As for the duplicate claims issue, the Examiner agreed that amending claim 9 to state explicitly that components A and B were present in a mixture (rather than amending claim 13 as proposed in the attachment) would overcome the objection. Amendments that would overcome the 112, 2nd rejections were discussed; see the attached proposed amendment.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

1. ☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2. ☐ Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.

Kathleen Kahler Fonda

KATHLEEN KAHLER FONDA
PRIMARY EXAMINER
ART UNIT 1623

Examiner Note: You must sign and stamp this form unless it is an attachment to a signed Office action.

Pending Claims with Proposed Amendments

Appl'n No.: 09/071,541

Title: **Methods to Modulate the Resistance Of Cells to Apoptosis Mediated by Mutant Epidermal Growth Factor Receptors**

Inventors: **Huang *et al.***

1. (twice amended) A method of modulating an apoptosis-inhibiting effect in a target cell or tissue of a mutant EGFR gene, comprising administering to the cell or tissue an effective amount of a tyrosine kinase inhibitor that is effective to reduce the resistance to the induction of apoptosis or resistance to the increased rate of apoptosis in the target cell or tissue in combination with a therapy that is effective to induce apoptosis or to increase the rate of apoptosis in the cell or tissue.

2. The method of claim 1, wherein the mutant EGFR gene is constitutively active.

3. The method of claim 2, wherein the mutant EGFR gene is Δ EGFR.

4. The method of any of claims 1 to 3, wherein the cell or tissue is a tumor selected from the group consisting of glioma, breast cancer, lung cancer and ovarian cancer.

5. The method of claim 4, wherein the tumor is a glioma.

6. The method of claim 1, wherein the apoptosis inducing or apoptosis rate increasing therapy is the administration of an agent selected from the group consisting of cisplatin, paclitaxel and vincristine.

7. The method of claim 1, wherein the tyrosine kinase inhibitor is relatively selective for a tumor specific mutant EGFR.

8. The method of claim 1, wherein the tyrosine kinase inhibitor is selected from the group consisting of Tyrphostin AG1478 and its derivatives.

9. (amended) A pharmaceutical composition comprising:

(A) an amount of an agent that is effective to induce apoptosis or increase the rate of apoptosis in a target cell or tissue; and

(B) an amount of a tyrosine kinase inhibitor that is effective to reduce **[the]** resistance to **[the]** induction of apoptosis or resistance to **an [the]** increased rate of apoptosis in the target cell or tissue **expressing a mutant EGFR gene**, the resistance being mediated by a mutant EGFR.

10. The composition of claim 9, wherein the apoptosis inducing or apoptosis rate increasing agent is an antitumor agent selected from the group consisting of cisplatin, paclitaxel and vincristine.

11. The composition of claim 9, wherein the tyrosine kinase inhibitor is relatively selective for a tumor specific EGFR.

12. The composition of claim 9, wherein the tyrosine kinase inhibitor is selected from the group consisting of Tyrphostin AG1478 and its derivatives.

13. **(Amended)** A kit for treating cancer comprising

(A) an amount of an agent that is effective to induce apoptosis or increase the rate of apoptosis in a target cell or tissue; and

(B) an amount of a tyrosine kinase inhibitor that is effective to reduce **[the]** resistance to **[the]** induction of apoptosis or resistance to **an [the]** increased rate of apoptosis in the target cell or tissue **expressing a mutant EGFR gene**, the resistance being mediated by a mutant EGFR[.];

(C) wherein said agent and inhibitor may be formulated for either independent or simultaneous administration.

14. The kit of claim 13, wherein the apoptosis inducing or apoptosis rate increasing agent is an antitumor agent selected from the group consisting of cisplatin, paclitaxel and vincristine.

15. The kit of claim 13, wherein the tyrosine kinase inhibitor is relatively selective for a tumor specific EGFR.

16. The kit of claim 13, wherein the tyrosine kinase inhibitor is selected from the group consisting of Tyrphostin AG1478 and its derivatives.